

Please add the following claims 54-58:

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--54. A secure network having a plurality of host computers accessible to users and interconnected with a non-secure communication medium such as the Internet, the secure network comprising:

a network security controller for enabling a security officer to generate at least one user profile for each user, each user profile defining at least one destination which the user is authorized to access; and,

security devices connected with said host computers for receiving the user profiles generated at the network security controller, each security device associated with one host computer, each security device having an authorization device for authorizing users at the associated host computer, the security device permitting the authorized user, via the associated host computer, to select a user's profile associated with the user and for restricting access of the host computer to the at least one destination defined in the selected user's profile, and wherein each security device includes a communication control system to control access of the host computer to the communication medium, said communication control system including a data storage device for storing data provided by said host computer in a memory space, and for transferring data out of said memory space while making the transferred data inaccessible to said host computer.

55. A security device for a multi-level secure network implementing security at a network layer (layer 3) of protocol hierarchy having a plurality of host computers accessible to users for communication over a computer network medium, said security device locatable between said host computer and the network medium, wherein said security device comprises a network interface for

connecting said security device to the network medium, and a port for connecting said security device to said host computer and further comprising a memory device connected with said port for storing data provided from said host computer in a memory space, and means for switching said data out of said memory space while making said switched data inaccessible to said host computer, thus controlling the pass-through of data between said host computer and the network medium.

56. A security device for a multi-level secure network implementing security at a network layer (layer 3) of protocol hierarchy having a plurality of host computers accessible to users and connected to a computer network medium, said security device connectable between at least one host computer bus and the network medium, said security device comprising

a local bus, a local RAM, and a local processor;

a network interface for connecting said local bus to the computer network medium and including a network processing means for transferring information between said local RAM and said network medium;

a communication separation means for connection between said local bus and said host bus and for preventing direct pass-through of information between said host bus and said local bus and for preventing direct access between said host bus and said local RAM, said communication separation means including a memory device for storing information provided over said host bus in a memory space, a first port interconnecting said host bus and said memory device, and a second port interconnecting said local bus and said memory device, said information transferrable from said memory space to said local bus while making the transferred information inaccessible to said host bus;

wherein said local processor processes information to be transferred between said host bus and said network medium in accordance with a predetermined security policy to determine whether communication between a host computer and the network medium is authorized, said local processor including means for accessing host bus information from said memory space and transferring said information to said local bus.

57. The security device of claim 56 wherein said local processor processes said host bus information in accordance with said predetermined security policy, transfers the processed host bus information to said local RAM for access by said network processing means, accesses network medium information placed in said local RAM by said network processing means, processes said network medium information in accordance with said security policy, and transfers the processed network medium information to said communication separation means for access by said host bus.

58. A security device for connecting a host computer from a host bus to a computer-accessible network, the security device comprising a local bus, a network interface for connecting said local bus to the computer-accessible network, and a communication separation and control system for connection between said local bus and said host bus, said communication separation and control system including a first port coupled to said host bus, a second port coupled to said local bus, and a signal storage device interconnecting said first and second ports, said signal storage device storing signals provided over said host bus in a host bus memory space and over said local bus in a local bus memory space, wherein said signals are transferable between said host bus memory space and said local bus memory space with said switched signals from said host bus memory space being

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invisible to said host bus after being switched to said local bus memory space, said communication separation and control system preventing pass-through of signals between said host bus and said computer-accessible network without transitory storage in said signal storage device, and further comprising security device processing means for controlling the transfer of signals out of said local bus memory space of said signal storage device.--

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